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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Crowell & Moring, L.L.P.
Suite 700
1200 G Street, N.W.
Washington, DC 20005

EXAMINER

EDMONDSON, LYNNE RENEE

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 08/08/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,443

Applicant(s)

HARDTKE, UWE

Examiner

Lynne Edmondson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/21/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 teaches the method of "Tox" clinching which is registered trademark.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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3. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Stary (USPN 5160118).

Stary teaches a method of producing a reinforced hollow section with a continuous periphery wherein diametrically opposed slotted openings are formed at the upper end and reinforcing plates (51) are inserted into the openings such that they partially project into the opening (col 9 lines 22-47). The edges are flush with the interior wall of the hollow body (figures 5A-6A) and plug welded (col 2 lines 42-62).

4. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanda et al. (USPN 5106031).

Sanda teaches a method of producing a reinforced hollow section with a continuous periphery (2) wherein an opening is formed at the upper end and a reinforcing plate (1a) is inserted into the opening such that it partially projects into the opening. The reinforcing plate comprises a flanged portion (1b) which is bent out and laid against the outer side of the hollow section such that it overlaps the edge of the opening. The edges are flush with the interior wall of the hollow body and welded (col 2 lines 20-21, col 2 lines 25-60 and figure 2).

5. Claims 1, 3, 4 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Katsuda et al. (USPN 6134767).

Katsuda teaches a method of producing a reinforced hollow section with a continuous periphery (3) wherein an opening is formed and a reinforcing plate (16) is

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inserted into the opening such that it projects into the opening. The reinforcing plate comprises a flanged portion (27) which is bent and partially overlaps the edge of the opening. The edges are flush with the interior wall of the hollow body forming a U-shaped section and welded (figure 1, col 8 lines 32-67 and col 9 lines 12-29). Welding may be performed in a variety of ways including beam welding (22) and projection welding (col 2 lines 52-61) through holes at the opposing side of the body (opposing slots at 22 and 15 in figure 1).

6. Claims 1, 3, 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Hall (USPN 6296330 B1).

Hall teaches a method of producing a reinforced hollow section with a continuous periphery (1) wherein diametrically opposed openings are formed (11 and between 8 and 9, figure 3) are formed and a reinforcing plate (18) is inserted into the openings such that it projects into the openings. The rear edge is flush with the interior wall of the hollow body, forming a U-shaped section and joined (figure 4, col 3 line 55 – col 4 line 47). Joining may be performed in a variety of ways including seam welding (col 4 lines 20-25) and Tox clinching (col 2 lines 60-62).

7. Claims 1, 3, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Schulze (USPN 6134767).

Schulze teaches a method of producing a reinforced, hydroformed hollow section with a continuous periphery (col 3 line 65 – col 4 line 23 and col 5 lines 1-67) wherein

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openings are formed by piercing (col 4 lines 13-22 and col 6 lines 1-8) and reinforcing members (14,34,50) are inserted into the opening such they project into the opening.

The reinforcing members may be any shape including plates (flanges, col 4 line 64 – col 8 line 20 comprises a flanged portion (27) which is bent and partially overlaps the edge of the opening. The edges are flush with the interior wall of the hollow body forming a U-shaped section and welded (figure 1, col 8 lines 32-67 and col 9 lines 12-29).

Welding may be performed in a variety of ways including beam welding and projection welding (col 2 lines 52-61). Beads are employed and forced into the plate (col 7 lines 45-63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wycech (USPN 4769391).

Wycech teaches a method of producing a reinforced hollow section (12) wherein openings are formed and a reinforcing member (10) comprising beads (pellets) stamped into a plate (col 5 lines 26-53) is inserted into the opening such that it projects

into the opening and lies flush with the rear wall where it is bonded (figures 5-6, col 5 line 54 – col 6 line 6, col 6 line 62 – col 7 line 64 and col 10 lines 20-26). However there is no disclosure of a closed periphery.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the process would be the same regardless of the article shape provided that an opening was formed in the top. Using this manner, any size or shape of structural member may be reinforced in a simple, lightweight and cost-effective manner (Wycech, col 1 lines 10-25 and col 2 lines 22-27).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze (USPN 6134767).

Schulze teaches a method of producing a reinforced, hydroformed hollow section with a continuous periphery (col 3 line 65 – col 4 line 23 and col 5 lines 1-67) wherein openings are formed by piercing (col 4 lines 13-22 and col 6 lines 1-8) and reinforcing members (14,34,50) are inserted into the opening such they project into the opening. The reinforcing members may be any shape including plates (flanges, col 4 line 64 – col 8 line 20 comprises a flanged portion (27) which is bent and partially overlaps the edge of the opening. The edges are flush with the interior wall of the hollow body forming a U-shaped section and welded (figure 1, col 8 lines 32-67 and col 9 lines 12-29). Welding may be performed in a variety of ways including beam welding and projection welding (col 2 lines 52-61). Beads are employed and forced into the plate (col 7 lines

45-63). However there is no disclosure of beads in the reinforcement member prior to insertion,

It would have been obvious to one of ordinary skill in the art at the time of the invention to stamp (press) beads into the reinforcement member as an alternative to after insertion to facilitate the process of increasing loading capacity in a simple and cost-effective manner (Schulze, col 7 line 64 – col 8 line 20).

Allowable Subject Matter

10. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: Katsuda teaches the invention essentially as claimed but does not teach the electrode and punch in the same tool. Projection welding methods conventionally teach a separate punching tool and electrode. See VanOtteren et al. (USPN 6281466 B1) and Watanabe (USPN 5872348).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Turek (USPN 5432989), Haffer (USPN 4640078), Longo et al.

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(USPN 5988734, hydroforming and welding), Kim (USPN 5457929, overlapping flange and slots), Wu (USPN 5984563, Tox clinching), Ghiran et al. (USPN 6305201 B1, hydroforming and piercing) and Tox Pressotechnik website.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (703) 306-5699. The examiner can normally be reached on M-F from 7-4 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703) 308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7118 for regular communications and (703) 305-7115 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Lynne Edmondson
Examiner
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 8/7/02

LRE
August 5, 2002